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10/550,596	09/25/2006	Susumu Noda	46311.1	1380
66416 7590 04/03/2009 MORISHITA PATENT OFFICE c/o KEATING & BENNETT, LLP 1800 Alexander Bell Drive SUITE 200 Reston, VA 20191				
EXAMINER BELOUSOV, ALEXANDER				
ART UNIT 2894		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 02/04/2009 have been fully considered but they are not persuasive.
2. **Regarding claim 9**, the Applicant argues on page 6, middle of the page, that the Deng reference "does not include any teaching or suggestion that cavities 102, 104 need to be arranged in a specific arrangement to achieve a *pg* classification".

The Deng reference does include teaching that cavities 102, 104 need to be arranged in a specific arrangement to achieve a *pg* classification. The evidence of the Examiner's assertion is the Applicant's admission in his FIG. 1. The FIG. 1 is Applicant's elected embodiment and therefore meets the above classification by the Applicant's admission. If it did not meet it, the Applicant would not have claimed what he claims in claim 9, namely "*pg* classification".

Now, please look at Examiner's rejection of claim 9. Examiner points out FIG. 1A and FIG. 1B of Deng. Please note that Deng's figures disclose the triangular lattice points and their arrangement, which is *identical* to the Applicant's in FIG. 1.

More specifically, FIG. 1A discloses "a square lattice" (see paragraph 15). FIG. 1B discloses "triangular points". The **combination** of the two figures would result in a figure identical to Applicant's FIG. 1. Deng specifically states that any cavity structure can be combined with any cavity shape (see paragraph 29). Therefore, since by combining the periodic structure of FIG. 1A and the cavity shape structure of FIG. 1B, the result is Applicant's FIG. 1, the Deng reference explicitly teaches a device that meets "*pg* classification", since that is what the **elected embodiment** of the Applicant's FIG. 1 teaches.

3. **Regarding claim 12**, the Applicant makes a similar argument to the above on page 8, middle of the page, that the Deng reference “does not include any teaching or suggestion that cavities 102, 104 need to be arranged in a specific arrangement to achieve a *pm, cm, or pl* classification”.

This is not considered persuasive for the reasons similar to above. Since the result of the combination of Deng's teachings is a figure identical to Applicant's elected embodiment, therefore the Deng's reference teaches the “pm, cm, or pl classification”

4. Applicant's arguments (pages 5 & 7) against the rejection of claims 9 & 12 in view of the Cunningham's reference, have been fully considered and **are persuasive**. The rejection of claims 9 & 12 in view of the Cunningham's reference has been withdrawn. However, since the rejection of claims 9 & 12 in view of Deng's reference is maintained (as the Examiner explained above), therefore the Finality of the previous action is also maintained.

Conclusion

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Belousov whose telephone number is 571-270-3209. The examiner can normally be reached on Monday - Thursday 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Nguyen can be reached on 571-272-2402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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/Alexander Belousov/
Examiner, Art Unit 2894
03/26/2009